

**GCLM, 1-274 aa, Human, His tag, E.coli**

**Cat.NO.: TP02212**

3th Edition

**Synonyms:** Glutamate-cysteine ligase, modifier subunit, GLCLR.

**Description:** Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase, is the first rate limiting enzyme of glutathione synthesis. The enzyme consists of two subunits, a heavy catalytic subunit and a light regulatory subunit. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia.

**Form:** Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol, 0.15M NaCl

**Molecular Weight:** 33.3kDa(298aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHHSSGLVPRGSHMGSHMGTD SRAAKALLARARTLHLQTGNLLNWGRRLRKKCPSTHSEELHDCIQKT  
LNEWSSQINPD LVREFPDVLECTVSHAVEKINPDEREEMKVS AKLFIVESNSSSSSTRSAVDMACSVLGVAQLDSVIA  
SPPIEDGVNLSLEHLQPYWEELENLVQSKKIVAIGTSDLDKTQLEQLYQWAQVKPNSNQVNLASCCVMPPDLTAF  
KQFDIQLLTHNDPKELLSEASFQEALQESIPDIQAHEWVPLWLLRYSVIVKSRGIIKSKGYILQAKRRGS

**Purity:** > 95% by HPLC

**Concentration:** 1 mg/ml

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.